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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,165	08/14/2001	Hung-kun Chen	46914-2003	8970
24504	7590	07/12/2005	EXAMINER	
THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP 100 GALLERIA PARKWAY, NW STE 1750 ATLANTA, GA 30339-5948			ZHENG, EVA Y	
			ART UNIT	PAPER NUMBER
			2634	

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/929,165

Applicant(s)

CHEN ET AL.

Examiner

Eva Yi Zheng

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 March 2005.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22, 24-26 and 29-33 is/are pending in the application.
- 4a) Of the above claim(s) 23, 27 and 28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 1-22, 24-26 and 29-33 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Specification***

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because "said" on line 9 and 10 should be deleted.

Correction is required. See MPEP § 608.01(b).

### ***Claim Objections***

3. Claims 1, 24, 25, 26 and 29 are objected to because of the following informalities:

- a) Regarding claim 1, line 7, please change: "said received signals" to – the received signals --, in order to avoid Lack of Antecedent Basis.
- b) Regarding claim 1, line 8, please change: "said plurality of receiving signals" to – the plurality of receiving signals --, in order to avoid Lack of Antecedent Basis.

- c) Regarding claim 1, line 18, please change: "said qualified assessing value" to – the qualified assessing value --, in order to avoid Lack of Antecedent Basis.
- d) Regarding claim 24, line 15, please change: "said qualified assessing value" to – the qualified assessing value --, in order to avoid Lack of Antecedent Basis.
- e) Regarding claim 25, line 9, please change: "said plurality of receiving signals" to – the plurality of receiving signals --, in order to avoid Lack of Antecedent Basis.
- f) Regarding claim 25, line 31, please change: "said qualified assessing value" to – the qualified assessing value --, in order to avoid Lack of Antecedent Basis.
- g) Regarding claim 26, line 9, please change: "said plurality of receiving signals" to – the plurality of receiving signals --, in order to avoid Lack of Antecedent Basis.
- h) Regarding claim 26, line 15, please change: "said qualified assessing value" to – the qualified assessing value --, in order to avoid Lack of Antecedent Basis.
- i) Regarding claim 29 line 9, please change: "said received signal packet" to – the received signal packet --, in order to avoid Lack of Antecedent Basis.

Appropriate correction is required.

*Remark:* Examiner suggest Applicant review all claims thoroughly for informalities.

***Allowable Subject Matter***

- 4. Claims 1-22, 24-26 and 29-33 would be allowable if rewritten to overcome the objections, set forth in this Office action.

The following is a statement of reasons for the indication of allowable subject matter: None of the prior art teaches or suggests a channel quality system receiving a

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plurality of groups having a plurality of channels, a frequency synthesizer for providing a continuous sinusoidal frequency signal, a mixer having an input of an RF signal and the continuous sinusoidal frequency signal and outputting a signal packet, a channel interference detector for detecting interference response to received signal packet, and a grouping/channel quality assessment unit for grouping channels, wherein if a quality assessing value of a first selective group is not within a predetermined range, the first group is an unqualified group, if a second selective group is overlapped with unqualified group, a size of unqualified group is smaller than that selective group, then overlapping channels between unqualified group and second selective group are disabled in second selective group, the sized of second selective group being reduced by the number of overlapping channels.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eva Y Zheng whose telephone number is 571 272-3049. The examiner can normally be reached on M-F, 7:30 AM to 5:00 PM.

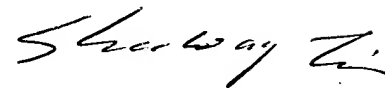
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 571 272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Eva Yi Zheng  
Examiner  
Art Unit 2634

July 8, 2005



**SHUWANG LIU**  
**PRIMARY EXAMINER**